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Attorney Docket Application No. P65684US1 (NEW) F rm PTO-1449 Applicant Robert R. STEUER et al. Information Disclosur Citation Filing Date **Group Art Unit** December 9, 2003 (not yet assigned) **U.S. Patent Documents** Patent Examiner Sub-Filing Date Name Class Date Initial Number Class Schweitzer et al. 12/1992 AA H1.114 W 3.638,640 02/01/1972 Shaw AB MAC 3,880,151 04/29/1975 Nilsson et al. w M AD 4,014,321 03/29/1977 March AE 4,081,372 03/28/1978 Atkin et al. AF 4,086,915 05/02/1978 Kofsky et al. Nielsen 4,167,331 09/11/1979 AG Shintani et al. AH 4,181,610 01/01/1980 4,223,680 09/23/1980 Jöbsis ΑI Hamaguri AJ 4,266,554 05/12/1981 AK Shaw et al. 4,295,470 10/20/1981 Foreign Patent Documents **Document** Sub-Trans-Class Country Date Class lation Number 04/1984 Yes No EP104772B1 Europe AL $M_{l}/$ Yes No M AM EP160768B1 11/1985 Europe WO 86/06946 **WIPO** Yes No m AN 12/1986 03/1989 WIPO Yes No AO WO 89/01758 **WIPO** AP WO 93/06456 04/1993 Yes No Other Documents (Including Author, Title, Date, Pertinent Pages, etc.) J.P. Payne and J.W. Severinghaus, Eds., Pulse Oximetry, Chapters 1 and 2 (@1986). AR John D. Bower and Thomas G. Coleman, Circulatory Function During Chronic Hemodialysis, Vol. XV Trans. Amer. Soc. Artif. Int. Organs, 1969, 373-377. AS Larry Reynolds, C. Johnson, A. Ishimaru, "Diffuse reflectance from a finite blood medium: applications to the modeling of fiber optic catheters," Sept. 1976, Vol. 15, No. 9, Applied Optics. pp. 2059-2067. Examiner **Date Considered** EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in

conformance and not considered. Include copy of this form with next communication to Applicant.

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Attorney Docket Application No. P65684US1 (NEW) **Form PTO-1449 Applicant** Robert R. STEUER et al. Information Disclosur Citation Filing Date **Group Art Unit** December 9, 2003 (not yet assigned) **U.S. Patent Documents** Examiner Patent Sub-Filing Date Name Class Initial Number Class Date 11/22/1983 Shaw et al. BA 4,416,285 BB 05/08/1984 4,446,871 Imura BC 4,653,498 03/31/1987 New, Jr. et al. BD 4,655,225 04/07/1987 Dahne et al. BE 4,685,464 08/11/1987 Goldberger et al. **BF** 4,714,080 12/22/1987 Edgar, Jr., et al. New et al. BG 4,770,179 09/13/1988 Jöbsis BH 4,805,623 02/21/1989 BI 4,819,752 04/11/1989 Zelin BJ 4,821,734 04/18/1989 Koshino 04/25/1989 Frick et al. BK 4,824,242 **Foreign Patent Documents** Sub-Trans-**Document** Country Class Date Class lation Number Yes No BL EP 0 529 412 03/03/1993 **EPO** Yes No **BM** Yes No BN Yes No BO Yes No BP Other Documents (Including Author, Title, Date, Pertinent Pages, etc.) R.N. Greenwood, C, Aldridge, L. Goldstein, L.R.I. Baker and W.R. Cattell, "Assessment of arteriovenous fistulae from pressure and thermal dilution studies: clinical experience in forearm fistulae," Clinical Nephrology, Vol. 23, NO. 4-1985, pp. 189-197. BR R.N. Greenwood, C. Aldridge and W.R. Cattell, "Serial blood water estimations and in-line blood viscometry: the continuous measurement of blood volume during dialysis procedures," Clinical Science (1984)66, pp. 575-583. BS C. Aldridge, R.N. Greenwood, W.R. Cattell and R.V. Barrett, "The assessment of arteriovenous fistulae created for haemodialysis from pressure and thermal dilution measurements," *Journal of Medical Engineering & Technology*, Vol. 8, No. 3, (May/June), pp. 118-124. Date Considered Examiner EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP \$ 609. Draw line through citation if not in

conformance and not considered. Include copy of this form with next communication to Applicant.

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F rm PTO-1449 Information Disclosure Citation					P65684US1		(NEW)	
					Applicant			
					Robert R. STEUER et al.			
					Filing Date		Group Art Unit	
					December 9, 2003 (not yet assigned		ssigned)	
U.S. Patent Documents								
Examiner Initial		Patent Number	Date	Name		Class	Sub- Class	Filing Date
M	CA	4,825,872	05/02/1989	Tan et al.		1\	/	
ME	CB	4,825,879	05/02/1989	Tan et al.				
MC	CC	4,832,484	05/23/1989	Aoyagi et al.				
mic	CD	4,863,265	09/05/1989	Flower et al.				
our	- CE	4,867,557	09/19/1989	Takatani et al.				
Mc	CF	4,920,972	05/01/1990	Frank et al.			\bigvee	
Mic	CG	4,925,299	05/15/1990	Meisberger et al.				
N	CH	5,028,787	07/02/1991	Rosenthal et al.				
Nx	CI	5,035,243	07/30/1991	,	Muz			
Mr	CJ	5,048,524	09/17/1991	E	Bailey			
W	CK	5,054,487	10/08/1991	C	larke			
Foreign Patent Documents								
		Document Number	Date	С	ountry	Class	Sub- Class	Trans- lation
	CL							Yes No
	CM							Yes No
	CN							Yes No
	СО							Yes No
	CP							Yes No
Other Documents (Including Author, Title, Date, Pertinent Pages, etc.)								
M	CR	L. Goldstein, L. Pavitt, R.N. Greenwood, C. Aldridge, L.R.I. Baker and W.R. Cattell, "The Assessment of Areteriovenous Fistulae From Pressure and Recirculation Studies," <i>ProcEDTNA-ERCA</i> (1985) Vol. 14., pp. 207-215.						
W	CS	R.N. Greenwood, C. Aldridge, L. Goldstein, L.R.I. Baker and W.R. Cattell, "Assessment of Arteriovenous Fistulas From Pressure and Recirculation Studies: Clinical Experience In 215 Upper Limb Fistulas," <i>ProcEDTA-ERA</i> (1985), Vol. 22, pp. 296-302.						
dit	СТ	Joseph M. Schmitt, James D. Meindl and Frederick G. Mihm, "An Integrated Circuit-Based Optical Sensor for In Vivo Measurement of Blood Oxygenation," <i>IEEE Transactions On Biomedical Engineering</i> , Vol. BME-33, No. 21, Feb. 1986, pp. 98-107.						
Examiner Walklaw // e e Date Considered 1/6/05								
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.								
conformance and not considered. Include copy of this form with next communication to Applicant.								

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Attorney Docket Application No. P65684US1 (NEW) **Form PTO-1449** Applicant Robert R. STEUER et al. Information Disclosur Citati n Filing Date Group Art Unit December 9, 2003 (not yet assigned) **U.S. Patent Documents** Sub-Filing Patent Examiner Date Name Class Date Initial Number Class 10/15/1991 DA 5.057.695 Hirao et al. DB 5,058,587 10//1991 Kohno et al. DC 5,059,394 10/22/1991 Phillips et al. Karkar et al. DD 5,066,859 11/19/1991 DE 5,092,836 03/03/1992 Polaschegg DF 5,101,825 04/07/1992 Gravenstein et al. Clark et al. DG 5,111,817 05/12/1992 DH 07/07/1992 Yamaguchi 5,127,406 08/11/1992 Mendelson et al. DI 5,137,023 DJ 5,158,091 10/27/1992 Butterfield et al. DK 03/16/1993 5,193,543 Yelderman Foreign Patent Documents Sub-Trans-Document Class Date Country Number Class lation DL Yes No Yes No DM DN Yes No Yes No DO Yes No DP Other Documents (Including Author, Title, Date, Pertinent Pages, etc.) Joseph M. Schmitt, Fred G. Mihm and James Meindl, New Methods for Whole Blood Oximetry, DR Annals of Biomedical Engineering, Vol., 14, pp. 35-52, 1986. Mark R. Arnfield, J. Tulip and Malcolm McPhee, "Optical Propagation in Tissue With Anisotropic Scattering," *IEEE Transactions on Biomedical Engineering*, Vol. 35, No. 5, May 1988, pp. 372-381. DS N.M. Krivitski, "Theory and validation of access flow measurements by dilution technique during hemodialysis," Kidney Int 48:244-250, 1995 **Date Considered** Examiner EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in

conformance and not considered. Includ copy of this form with next communication to Applicant.

Page 5 of 6

Attorney Docket Application No. P65684US1 (NEW) Form PTO-1449 **Applicant** Robert R. STEUER et al. Information Discl sur Citati n Filing Date Group Art Unit December 9, 2003 (not yet assigned) U.S. Patent Documents Examiner Patent Sub-Filing Date Name Class Initial Number Class Date 08/24/1993 **EA** 5,237,999 Von Berg **EB** 5,285,783 02/15/1994 Secker EC 10/04/1994 Steuer et al. 5,351,686 ED 5,456,253 10/10/1995 Steuer et al. EE 5,499,627 03/19/1996 Steuer et al. **EF** 5,520,177 05/28/1996 Ogawa et al. EG Simonsen et al. 5,551,422 09/3/1996 01/21/1997 Krivitski EH 5,595,182 EI 5,785,657 07/28/ 1998 Breyer et al. EJ 08/25/1998 Delonzor et al. 5,797,841 09/08/1998 EK 5.803.908 Steuer et al. Foreign Patent Documents **Document** Sub-Trans-Country Class Date Class lation Number EL Yes No Yes No **EM** Yes No **EN** Yes No EO EP Yes No Other Documents (Including Author, Title, Date, Pertinent Pages, etc.) N.M. Krivitski, "Novel method to measure access flow during hemodialysis by ultrasound velocity dilution technique," ASAIO J 41:M741-M745, 1995 ER T.A. Depner and N.M. Krivitski, "Clinical measurement of blood flow in hemodialysis access fistulae and grafts by ultrasound dilution," ASAIO J 41:M745-M749, 1995) ES D. Yarar et al., "Ultrafiltration method for measuring vascular access flow rates during hemodialysis," Kidney Int., 56: 1129-1135 (1999) Examiner **Date Considered**

EXAMINER: Initial if reference considered, who ther or not citation is in conformance with MPEP § 609. Draw line through citation if not in

conformance and not considered. Include copy of this form with next communication to Applicant.

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Attorney Docket Application No. P65684US1 (NEW) **Form PTO-1449 Applicant** Robert R. STEUER et al. Information Disclosur Citation Filing Date Group Art Unit December 9, 2003 (not yet assigned) U.S. Patent Documents Examiner Patent Sub-Filing Date Name Class Initial Number Class Date 10/06/1998 FA 5,817,009 Rosenheimer et al. FB 10/26/1999 Kaffka et al. 5,974,337 FC Krivitski et al. 6,041,246 03/21/2000 FD 6,117,099 09/12/2000 Steuer et al. FE 6,153,109 11/28/2000 Krivitski FF 6,167,765 01/02/2001 Weitzel Cole et al. FG 6,189,388 02/20/2001 Krivitski FH 6,210,591 04/03/2001 FI 6,452,371 09/17/2002 Brugger FJ FK Foreign Patent Documents Sub-Trans-Document Class Date Country lation Number Class Yes No FL **FM** Yes No Yes No FN Yes No FO FP Yes No Other Documents (Including Author, Title, Date, Pertinent Pages, etc.) N.M. Krivitski et al., "Saline Release Method to Measure Access Flow (AF) by Ultrasound Dilution during Hemodialysis," JASN Abstracts, 8:164A, 1997 FR Myk FS FT Date Considered Examiner EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609. Draw fine through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.